

Michael Caswell, Ph.D.  
C.B. Fleet Company, Inc.  
4615 Murray Place  
Lynchburg, VA 24502  
(434) 528-4000 x8238  
(434) 528-1324 (F)  
Email: [caswellm@cbfleet.com](mailto:caswellm@cbfleet.com)

Education	University of North Carolina, Biochemistry Albion College, Chemistry and Biology	Ph.D. B.A.
-----------	---	---------------

Graduate Experience	Research Associate Department of Pediatrics University of Colorado Medical School  Post-doctoral Fellow Molecular Biophysics and Biochemistry Yale University
---------------------	---

Experience	2001-date Director of Scientific Affairs C.B.Fleet Company, Inc. Lynchburg, VA  2001-2001 Manager of Scientific Affairs C.B.Fleet Company, Inc. Lynchburg, VA  2000-2001 Senior Development Scientist C.B.Fleet Company, Inc. Lynchburg, VA  1999-2000 Senior Scientist C.B.Fleet Company, Inc. Lynchburg, VA  1998-1999 Clinical Investigator Stephens & Associates, Inc. Dallas, TX  1997-1998 Director of Research & Product Development Cosmaceutical Marketing, Inc Dallas, TX  1995-1997 Director of Research & Development Body Drench Systems Alexandria, TN
------------	--

1993-1994 Director of Drug Delivery & Formulation  
Genta, Inc.  
San Diego, CA

1986-1993 Director of Skin Biology Research  
Schering-Plough HealthCare Products  
Memphis, TN

1982-1986 Group Leader of Skin Care  
Unilever Research U.S.  
Edgewater, NJ

Professional  
Organizations

American Academy of Dermatology  
Society of Investigative Dermatology  
Photomedicine Society  
Society of Cosmetic Chemists  
American Chemical Society

Technical Exhibits

Roberts LK, Beasley DG, Caswell M “Sunscreens Provide Protection  
Against Ultraviolet Radiation (UVB) Induced Suppression of Allergic  
Contact Dermatitis in Mice,” 2<sup>nd</sup> Annual Photomedicine Society Meeting,  
December 4, 1992

Caswell M “Human Melanogenesis from Tanning Bed Exposure Does Not  
Require Erythema,” 6<sup>th</sup> Annual Photomedicine Society Meeting, March  
20, 1997

Caswell M “Exposure to Tanning Bed Radiation is Drying to Human  
Skin,” 6<sup>th</sup> Annual Photomedicine Society Meeting, March 20, 1997

King MK, Caswell M, Blochowicz HA, Adams K, Greene JA, Roberts RL  
“The Use of the Melanoderm Tissue System to Predict the Efficacy of  
Skin Lightening and Skin Darkening Test Materials,” Society of Cosmetic  
Chemists, December 10, 1998

Caswell M, Stephens TJ “A Reassessment of the Photomaximization  
Procedure,” 8<sup>th</sup> Annual Photomedicine Society Meeting, March 18, 1999

Sayre RM, Caswell M “Adverse drug light photoreactions and the need to  
warn indoor tanners about the risks,” 9<sup>th</sup> Annual Photomedicine Society  
Meeting, March 9, 2000

Polefka TG, Nabi Z, Caswell M, Cardona A, Tavakkol A, Soliman N,  
Rizer RL, “Photoprotective value of topical vitamin E: a human clinical  
study,” 61<sup>st</sup> Annual Society of Investigative Dermatology Meeting, May

10-14, 2000

Caswell M, Dowdy J, Sayre R “Maintenance of a tan induced by a tanning bed,” 10<sup>th</sup> Annual Photomedicine Society Meeting, March 1, 2001

Invited Speaker

“Ultraviolet Radiation and the Skin,” Tennessee Society for Histotechnology, Memphis, TN, May 1, 1987

“Artificial Pigmentation,” Southwest Chapter Society of Cosmetic Chemists, Dallas, TX, September 11, 1987

“Artificial Tanning,” National Chemistry Day Symposium, Memphis, TN, November 6, 1987

“Artificial Skin Coloration,” Southeast Chapter of Cosmetic Chemists, Memphis, TN, February 21, 1989

“Sun and Skin,” American Chemical Society-Memphis Chapter, Memphis, TN March 15, 1989

“Skin Biology Research at Schering-Plough,” Sigma Xi Research Colloquium, Memphis, TN, October 29, 1992

“Lotion Manufacturers,” Today’s Image National Tanning Expo, Las Vegas,  
June 23, 1995

“Skin Care in Your Salon,” National Tanning Trade Expo, Chicago, October 22, 1995

“Skin Care in Your Salon,” Today’s Image Canadian Tanning Expo, Toronto, January 12, 1996

“Skin Care in Your Salon,” Today’s Image National Tanning Expo, Las Vegas, June 11, 1996

“Career Opportunities in Science,” Tennessee Governor’s School for the Sciences, Knoxville, TN, July 9, 1996

“Advanced Skin Care in Your Salon,” National Tanning Trade Expo, Chicago, November 1, 1996

“Skin Care in Your Salon,” Today’s Image Winter Expo, Atlantic City, February 9, 1997

“Skin Care in Your Salon,” Today’s Image National Tanning Expo, Las

Vegas, June 11, 1997

“Skincare Smarts,” Today’s Image National Tanning Expo, Las Vegas, June 11, 1997

“Positive Effects of Ultraviolet Radiation,” National Tanning Trade Expo, Chicago, October 11, 1997

“Defending the Future of Indoor Tanning,” The Tanning Shop Conference, United Kingdom, October 25, 1997

“Skin Care in Your Salon,” Today’s Image Winter Expo, Atlantic City, February 7, 1998

“State and Federal Tanning Regulations and the Role of the FDA,” Today’s Image National Tanning Expo, Las Vegas, June 22, 1998

“Skin Type Analysis, Photosensitivity, and the Tanning Process,” Today’s Image National Tanning Expo, Las Vegas, June 22, 1998

“The Goodness of Tanning,” Today’s Image National Tanning Expo, Las Vegas, June 23, 1998

“The Latest in UVA, UVB & Skin Care,” National Tanning Trade Expo, Chicago, October 2, 1998

“Straight Talk - Interactive Mixer,” National Tanning Trade Expo, Chicago, October 2, 1998

“Communicating With Your Customer: An Exercise in Role-Playing,” National Tanning Trade Expo, Chicago, October 4, 1998

“Skin Type Analysis, Photosensitivity, and the Tanning Process,” Today’s Image National Tanning Expo, Las Vegas, June 14, 1999

“State and Federal Tanning Regulations and the Role of the FDA,” Today’s Image National Tanning Expo, Las Vegas, June 14, 1999

“Advanced Issues in Skin Care; FDA and Regulatory Update,” Today’s Image National Tanning Expo, Las Vegas, June 14, 1999

“The Risks and Benefits of Indoor Tanning,” Association des Salons de Bronzage du Quebec Get Together ‘99, Montreal, October 30, 1999

“Explaining the Benefits of Tanning to Customers and Employees,” National Tanning Trade Expo, Chicago, November 6, 1999

“Skin-typing Your Customers,” National Tanning Trade Expo, Chicago, November 7, 1999

“Skin Type Analysis, Photosensitivity, and the Tanning Process,” Today’s Image National Tanning Expo, Las Vegas, June 26, 2000

“State and Federal Tanning Regulations and the Role of the FDA,” Today’s Image National Tanning Expo, Las Vegas, June 26, 2000

“Advanced Issues in Skin Care; Issues Facing the Tanning Industry,” Today’s Image National Tanning Expo, Las Vegas, June 27, 2000

“The Scientific Basis for Indoor Tanning Exposure Schedules,” American Society of Photobiology, July 8-10, 2001.

Patent	Caswell M, Corr JJ, Dobrovolny MS, Lander LH, Narath WR, Theiler RF “Cleaning Compositions with Skin Protection Agents,” U.S. Patent 4,695,395: September 22, 1987
--------	---

Regulatory	Lubriscan Ultra Scan Gel+, 510(k) Notification to United States Food Drug
------------	---

Submissions	Administration, Center for Devices and Radiological Health, Submitted Jan. 8, 1998, Approved Apr. 9, 1998, #K980091, 512p
-------------	---

Book Chapters	Caswell, M, “Sunscreen Formulations and Tanning Formulations,” in <i>The Chemistry and Manufacture of Cosmetics, Volume II - Formulating, 3<sup>rd</sup> Edition</i> , M. Schlossman, Ed., Allured Publishing Corp, Carol Stream, IL, 2001, pp. 73-99
---------------	---

	Caswell, M, “The Theory of Sunscreens and Tanning,” in <i>The Chemistry and Manufacture of Cosmetics, Volume II - Formulating, 3<sup>rd</sup> Edition</i> , M. Schlossman, Ed., Allured Publishing Corp, Carol Stream, IL, 2001, pp. 49-71
--	--

Book Review	Caswell, M, “Career Management for Scientists and Engineers,” by John K. Borchardt, in <i>J Chem Educ</i> 2001; <b>78</b> :169-170.
-------------	---

Peer-reviewed  
Bibliography

Zeeberg B, Caswell M, Caplow M, "Concerning a Reported Change in Rate-Determining Step in Chymotrypsin Catalysis," *J Amer Chem Soc* 1973;**95**:2734-2736

Zeeberg B, Caswell M, Caplow M, "Substrate Induced pK Perturbations with Chymotrypsin and the Possible Significance of Nonproductive Binding," *J Amer Chem Soc* 1975;**97**:7346-7352

Caswell M "Mechanistic Studies of Chymotrypsin and of Alkaline Phosphatase," Dissertation, University of North Carolina, 1976, 146p

Caswell M, Schmir GL "Hydrolysis of Isomeric Imidate Esters," *J Amer Chem Soc* 1979;**101**:7323-7329

Caswell M, Schmir GL "Formation and Hydrolysis of Lactones of Phenolic Acids," *J Amer Chem Soc* 1980;**102**:4815-4821

Caswell M, Chaturverdi RK, Lane SM, Zvilichovsky B, Schmir GL "Intramolecular Aminolysis of Esters. O-Acetylserine and  $\gamma$ -Esters of Glutamic Acid," *J Org Chem* 1981;**46**:1585-1593

Caswell AK, Caswell M "Antenatal Treatment to Prevent RH Immunization," *Lab Med* 1983;**14**:655-658

Caswell M "Pressure Ulcers," *J Amer Acad Dermatol*, 1999;**40**:131

Caswell M, "The Development of a Tan from Exposures to a Tanning Bed," *Photodermatology, Photoimmunology, and Photomedicine* 2000;**16**:10-14

Caswell, M, "Sunscreen Formulations and Tanning Formulations," *Cosmetics and Toiletries* 2001;**116**:49-50,52,54-56,58,60

Caswell M, Kane M. "Comparison of the Moisturization Efficacy of Summer's Eve Vaginal Moisturizer to Replens: Pectin vs Polycarbophil Technologies," *Journal Cosmetic Science* 2002;**53**:81-87

Conductance,"

Caswell M, "The Effect of Tanning Bed Exposures on Skin

*Photodermatology, Photoimmunology, and Photomedicine, in press*

Other  
Bibliography

Caswell M "The Bafflement of Biodegradability," *Looking Fit*, **10**: 1995: 11:28,30

Caswell M "Moisture Retention in the Skin," *Looking Fit*, **10**: 1995: 13:

26,28

Caswell M "The Future of Tanning," *Looking Fit*, **11**: 1996: 1:26

Caswell M "Pigmentation Chemistry," *Looking Fit*, **11**: 1996: 2:28-29

Caswell M, Kulikowski S, Welch T "Guide to Skincare Ingredients," *Today's Image*, **9**: 1996: 3:60,62,64,66,68,70,72,74,76

Caswell M "Ingredients for Pigmentation," *Looking Fit*, **11**: 1996: 4:28,30

Caswell M, "Know the ABC's of AHA's," *Today's Image*, **9**: 1996: 4:23-24

Caswell M "Advising Your Clients on UVA and UVB," *Looking Fit*, **11**: 1996: 7:20

Caswell M "Skin Types, Tanning & Sun Protection," *Looking Fit*, **11**: 1996: 8:26,28

Caswell M "Managing Risk by Moderation," *Looking Fit*, **11**: 1996: 9:16,25

Caswell M "Those Unforgettable Lips," *Looking Fit*, **11**: 1996: 10:24

Caswell M "Let There Be Light," *Tanning Trends*, September, **11**: 1996: 8:55-56,60

Caswell M "Natural or Synthetic?," *Looking Fit*, **11**: 1996: 11:20,22

Caswell M "Tanning for Albinos and Skin Type I Persons," *Looking Fit*, **11**: 1996: 12:20,22

Caswell M "Moisturization Therapy for Dry Skin," *Looking Fit*, **11**: 1996: 13:22,24

Caswell M "Oil-Free Technology Has Something for Everyone," *Looking Fit*, **11**: 1996: 14:14,16

Caswell M "Short- and Long-Term Tanning," *Looking Fit*, **12**: 1997: 1:22,26

Caswell M "The Ultimate Photosensitizer," *Looking Fit*, **12**: 1997: 2:26,28

Caswell M, Welch T "Guide to Skincare Ingredients: Part I," *Today's Image*, **10**: 1997: 3:60,62,64,66,68,72,74,76,80

Caswell M "Product Integrity," *Looking Fit*, **12**: 1997: 4:32,34

Caswell M, Welch T "Guide to Skincare Ingredients: Part II," *Today's Image*, **10**: 1997: 4:36-37,39-43,45

Caswell M "The Ultimate Photosensitizer," *Looking Fit*, **12**: 1997: 5:26,28

Caswell M "Skin Moisturization in the Tanning Bed," *Looking Fit*, **12**: 1997: 6:24,26

Caswell M "The Four Moisturizers," *Looking Fit*, **12**: 1997: 7:24,26

Caswell M "PUVA Therapy Induces Melanoma," *Looking Fit*, **12**: 1997: 9:18

Caswell M "Embrace Your Dermatologist," *Looking Fit*, **12**: 1997: 11:24

Caswell M "Skin Type: Genotype vs. Phenotype," *Looking Fit*, **12**: 1997: 12:52-53

Caswell M "Theories and Facts on Melanoma," *Looking Fit*, **12**: 1997: 13:24,26

Caswell M "An Overlooked Aspect of Tanning," *Looking Fit*, **12**: 1997: 14:26,30

Caswell M "Commencez Maintenant Avant Qu'il Soit Trop Tard," *Info Bronzage*, **1**: 1997: 2:14,16

Caswell M "Skin Type Analysis, Photosensitivity, and Tanning," *Today's Image*, **11**: 1998: 1:23-24,26

Caswell M "Fungus Among Us," *Looking Fit*, **13**: 1998: 3:24

Caswell M "Moisturize, Moisturize, Moisturize," *Looking Fit*, **13**: 1998: 4:30-31

Caswell M "Melanoma, Again," *Looking Fit*, **13**: 1998: 6:30,32

Caswell M "Tanning Without Ultraviolet Radiation," *Looking Fit*, **13**: 1998: 7:22,24

Caswell M "The First Step to Skincare," *Looking Fit*, **13**: 1998: 8:22,24

Caswell M "Free Radicals in Skin," *Looking Fit*, **13**: 1998: 9:16



Caswell M "Protecting Your Future," *Looking Fit*, **13**: 1998: 10:38,40

Caswell M "Shootout in D.C.," *Today's Image*, **11**: 1998: 1:50,52,54,55

Caswell M, "Lotions and Packaging," *Looking Fit*, **14**: 1999: 2:26,28

Caswell M, "Inspecting Your Salon," *Looking Fit*, **14**: 1999: 3:80,81

Caswell M, "The Development of Dry Skin," *Looking Fit*, **14**: 1999: 4:62,64

Caswell M, "Tanning Year 'Round," *Island Sun Times*, **3**: 1999: 4: 43

Caswell M, "DHA Tanning: Past, Present, and Future," *Looking Fit*, **14**: 1999: 6:30,32

Caswell M, "The Dangers of Tanning," *Looking Fit*, **14**: 1999: 7:34-35.

Caswell M, "FDA Considers Comments on Proposed Rulemaking," *Looking Fit*, **14**: 1999: 9:32-34.

Caswell M, "Tradition, Tradition, Tradition," *Looking Fit*, **14**: 1999: 10:28,30.

Caswell M, Wesson JD, "The Fine Art of Reading Body Language," *Island Sun Times*, **3**: 1999: 60.

Caswell M, "Inside the FDA," *Today's Image*, **12**: 1999: 10:10,12,14,16,20.

Caswell M, "Exposure Schedule Should be Maintained," *Looking Fit*, **14**: 1999: 12:34,36,38,40.

Caswell M "Le Mélanome et le Rayonnement Ultraviolet," *Info Bronzage*, **3**: 1999: 2:8,9.

Caswell M, "Benefits of Indoor Tanning," *Today's Image*, **13**: 2000: 24.

Caswell M, Dumas RA "When Employees Leave: Eight Rules to Follow," *Island Sun Times*, **4**: 2000: 102.

Caswell M "Photosensitivity," *Tan Info*, **2**: 2000: 4:30-32,34.

Caswell M, Wesson JD, "Dermatologists' View of Tanning Salons: Good News / Bad News," *Island Sun Times*, **4**(9): 2000: 76.

Caswell M “The influence of scientific research on indoor tanning,” *Tan Info*, **3**: 2001:26,28,30,32.

Caswell M, “Vitamin D and UVB,” *Today’s Image*, **15**: 2002: 84,86,90,92,94